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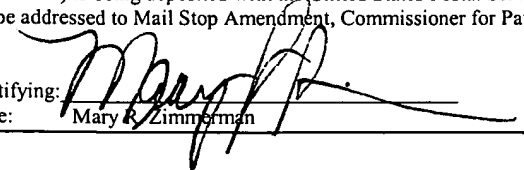
PATENT

Docket No. 2018721-7012094003

## CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date indicated below with sufficient postage as First Class Mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: August 27, 2004

Signature of Person Certifying:   
Printed Name: Mary R. Zimmerman

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Hassan Mostafavi

Serial No.: 10/678,741

Group Art Unit: 2882

Filed: October 3, 2003

Examiner: Craig E. Church

For: METHOD AND SYSTEM FOR  
RADIATION APPLICATION

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Supplemental Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached forms PTO/SB/08a and PTO/SB/08b.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicants is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicants as such.

**1. Timing of the Information Disclosure Statement:**

☒ This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is (1) within three months of the filing date of the application, which is not a continued prosecution application filed under § 1.53(d) or (2) within three months of entry of the national stage as set forth in

37 CFR § 1.491; or (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

- ☐ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the fee due under 37 CFR § 1.17(p) to the deposit account referenced below.
- ☒ However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and a statement under 37 CFR § 1.97(e) is included below, thus no fee is required.

☐ This IDS is being submitted under 37 CFR § 1.97(c), that is after mailing of a first Office Action on the merits, but before a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311.

- ☐ The fee due under 37 CFR § 1.17(p) is submitted herewith.
- ☐ A statement under 37 CFR § 1.97(e) is included below, thus no fee is required. In the event that this IDS is not received before a Final Action or a Notice of Allowance, then Applicant respectfully requests that the Office consider the filing of these papers to be submitted under 37 CFR § 1.97(d) and charge the fee due under 37 CFR § 1.17(p) to the deposit account below.

☐ This IDS is being submitted under 37 CFR § 1.97(d), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee. A statement under 37 CFR § 1.97(e) is included below. The fee due under 37 CFR § 1.17(p) is submitted herewith.

☐ This IDS is being submitted under 37 CFR § 1.97(i), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee.

**STATEMENT UNDER 37 CFR § 1.97(e):**

- ☒ Some items contained in this IDS were cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.
- ☐ No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this statement after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this IDS.

**2. Copies of the Cited Items:**

- ☐ Copies of all of the items listed on the attached forms PTO/SB/08a and PTO/SB/08b are enclosed.
- ☒ Pursuant to 37 CFR § 1.98(a)(2)(i), copies of the following items identified on form PTO/SB/08a under the heading U.S. Patent Documents (Item Nos. 1-13) are not attached.

- ☒ Copies of only the following items listed on the attached forms PTO/SB/08b (Item Nos. 1-6) are enclosed.
- ☒ Copies of the following documents listed in PTO/SB/08a (Item Nos. 14-28) and copies of the following documents listed in PTO/SB/08b (Item Nos. 7-10) were previously cited by the Office or submitted in Information Disclosure Statements in related applications: U.S. Serial No. 09/893,122 filed June 26, 2001; U.S. Serial No. 09/178,383 filed October 23, 1998, now Patent No. 6,621,889; U.S. Serial No. 09/178,384 filed October 23, 1998, abandoned in favor of U.S. Serial No. 09/712,724 filed November 14, 2000, now Patent No. 6,690,965; and U.S. Serial No. 09/178,385 filed October 23, 1998, and accordingly, copies are not included herewith. See 37 C.F.R. § 1.98(d). The Examiner is requested to make these documents of record.

**3. Concise Explanation of Relevance:**

- ☒ A concise explanation of relevance of the items listed on forms PTO/SB/08a and PTO/SB/08b is not given.
- ☐ A concise explanation of relevance of some of the items listed on forms PTO/SB/08a and PTO/SB/08b is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references (copy attached).

**4. Related Applications:**

- ☒ Applicant(s) bring to the Office's attention the following related, co-pending application(s): U.S. Serial No. U.S. Serial No. 09/893,122 filed June 26, 2001; U.S. Serial No. 09/178,383 filed October 23, 1998, now Patent No. 6,621,889; U.S. Serial No. 09/178,384 filed October 23, 1998, abandoned in favor of U.S. Serial No. 09/712,724 filed November 14, 2000, now Patent No. 6,690,965; and U.S. Serial No. 09/178,385 filed October 23, 1998.

**5. Conclusion:**

Citation of the above documents shall not be construed as:


1. an admission that the documents are necessarily prior art with respect to the instant invention;
2. a representation that a search has been made, other than as described above; and
3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

It is respectfully requested that the Examiner indicate consideration of the cited references by returning a copy of the attached forms PTO/SB/08a and PTO/SB/08b with initials or other appropriate

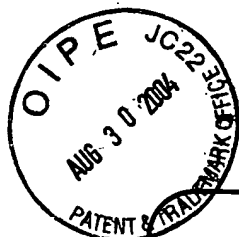
marks. In the unlikely event that the transmittal letter is separated from this document and the U.S. Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-2518** referencing 7012094003. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Dated: 8/27/04

By:   
Gerald Chan  
Registration No. 51,541

Bingham McCutchen LLP  
Three Embarcadero Center, Suite 1800  
San Francisco, California 94111-4067  
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Facsimile: (650) 849-4800



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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	10/678,741	
	Filing Date	October 3, 2003	
	First Named Inventor	Hassan MOSTAFAVI	
	Art Unit	2882	
	Examiner Name	Craig E. Church	
Total Number of Pages in This Submission	8	Attorney Docket Number	2018721-7012094003

**ENCLOSURES (check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <b>forms PTO/SB/08a, PTO/SB/08b, 6 references, postcard receipt</b>		
<table border="1"><tr><td>Remarks</td><td></td></tr></table>			Remarks	
Remarks				

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	Gerald Chan Bingham McCutchen LLP
Signature	
Date	August 27, 2004

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Mary R. Zimmerman		
Signature		Date	August 27, 2004

This collection of information is required by 37 CFR 1.57. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Substitute for form 1449A-PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

Application Number	10/678,741
Filing Date	October 3, 2003
First Named Inventor	Hassan Mostafavi
Art Unit	2882
Examiner Name	Craig E. Church
Attorney Docket Number	2018721-7012094003

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number – Kind Code <sup>2</sup> (if known)			
	1	US-4,710,717	12-01-87	Pele et al.	
	2	US-4,895,160	01-23-90	Reents	
	3	US-4,971,065	11-20-90	Pearce	
	4	US-5,513,646	05-07-96	Lehrman	
	5	US-5,565,777	10-15-96	Kanayama et al.	
	6	US-5,662,112	09-02-97	Heid	
	7	US-5,993,397	11-30-99	Branson	
	8	US-6,144,874	11-07-00	Du	
	9	US-6,527,443	03-04-03	Vilsmeier et al.	
	10	US-6,661,617 B1	08-26-03	Crampton	
	11	US-6,621,889 B1	09-16-03	Mostafavi	
	12	US-6,724,930 B1	04-20-04	Kosaka et al.	
	13	US-2003/0210812 A1	11-13-03	Khamene et al.	

**FOREIGN PATENT DOCUMENTS**

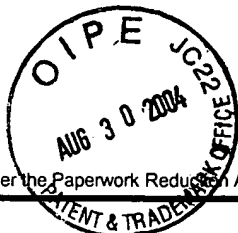
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> – Number <sup>4</sup> – Kind Code <sup>5</sup> (if known)				
	14	WO 98/38908	09-11-98	Schneider Medical Technologies, Inc.		

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2.0 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 2

**Complete if Known**

Application Number	10/678,741
Filing Date	October 3, 2003
First Named Inventor	Hassan Mostafavi
Art Unit	2882
Examiner Name	Craig E. Church
Attorney Docket Number	2018721-7012094003

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number – Kind Code <sup>2</sup> (if known)			
	15	US-5,482,042	01-09-96	Fujita	
	16	US-5,619,995	04-15-97	Lobodzinski	
	17	US-5,622,187	04-22-97	Carol	
	18	US-5,638,819	06-17-97	Manwaring et al.	
	19	US-5,662,111	09-02-97	Cosman	
	20	US-5,820,553	10-13-98	Hughes	
	21	US-5,912,656	06-15-99	Tham et al.	
	22	US-6,076,005	06-13-00	Sontag et al.	
	23	US-6,144,875	11-07-00	Schweikard et al.	
	24	US-6,146,390	11-14-00	Heilbrun et al.	
	25	US-6,272,368	08-07-01	Alexandrescu	
	26	US-6,405,072	06-11-02	Cosman	
	27	US-6,473,635	10-29-02	Rasche	
	28	US-6,501,981	12-31-02	Schweikard et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> – Number <sup>4</sup> – Kind Code <sup>5</sup> (if known)				

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

1

**Complete if Known**

Application Number

10/678,741

Filing Date

October 3, 2003

First Named Inventor

Hassan Mostafavi

Art Unit

2882

Examiner Name

Craig E. Church

Attorney Docket Number

2018721-7012094003

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	1.	ADAMS, W.B. et al. "Correlator Compensation Requirements for Passive Time-Delay Estimation with Moving Source or Receivers" IEEE (April, 1980) ASSP-28(2):158-168	
	2.	BANKMAN, I.N. et al. "Optimal Detection, Classification, and Superposition Resolution in Neural Waveform Recordings" IEEE (August, 1993) 40(8):836-841	
	3.	FEE, M.S. et al. "Automatic Sorting of Multiple Unit Neuronal Signals in the Presence of Anisotropic and non-Gaussian Variability" J. Neuroscience Methods (1996) 69:175-188	
	4.	NEVATIA, R. et al. "Human Body Tracking with Articulated Human Body Model" (November, 2002) pgs. 1-3	
	5.	PARADIS, A.L. et al. "Detection of Periodic Signals in Brain Echo-Planar Functional Images" IEEE (January 1, 1997) pgs. 696-697	
	6.	SURAMO, M. P. et al. "Cranio-Caudal Movements of the Liver, Pancreas and Kidneys on Respiration" Acta Radiol. Diagn. (1984) 2:129-131	
	7.	BARONI, G. and G. FERRIGNO "Real-time Motion Analysis for Definition and Control of Patient Position in Radiotherapy" SPIE 0-81942084-0/96 2709:506-515	
	8.	GERIG, L.H. et al. "The Development and Clinical Application of a Patient Position Monitoring System" Ottawa Regional Cancer Centre, General Division, 501 Smyth Rd., Ottawa, Ontario, Canada K1H 8L6; National Research Council, IIT, Ottawa, Ontario, Canada K1A 0R6; SPIE Videometrics III (1994) 2350:59-72	
	9.	LOPRESTI, B.J. et al. "Implementation and Performance of an Optical Motion Tracking System for High Resolution Brain PET Imaging" IEEE Transactions on Nuclear Science (December, 1999) 46(6):2065-2067	
	10.	Preliminary Search Brochure entitled "Kinematic Measurement Systems" by Qualisys printed April 4, 1994	
	11.		
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Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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